Center of Excellence for
Collaborative
Innovation

Fostering Government Innovation

- **Agencies are experimenting with new models of collaboration and innovation**
  - **Finding their way through implementation independently**

- **Current scenario: Multiple Agencies independently working to implement new Collaborative Innovation models that affect every aspect of Government processes**
  - **Funding**
  - **Acquisition**
  - **Contracts**
  - **Reporting**

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Collaborative Innovation – A Unified Approach

- **NASA, with support from OSTP, established a Center of Excellence for Collaborative Innovation (CoECI) to serve as a convening point for all agencies**

- **Officially formed 1 November 2011**
  - **Organized to develop best practices for innovation and other collaborative techniques**
  - **Located in the Human Exploration and Operations Mission Directorate (HEOMD) but serving NASA and the U.S. Government as a whole**
  - **NASA Civil Servants and Support contractors**
  - **Platform providers**

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CoECI Personnel

- **CoECI Director**
  Jason Crusan, NASA HQ

- **CoECI Deputy Director**
  Jeffrey R. Davis, MD, NASA JSC

- **CoECI Manager**
  Lynn Buquo, NASA JSC

- **CoECI Program Specialist**
  Carolyn A. Woolverton, NASA JSC

- **CoECI External Agreement Manager**
  Karl Becker, Stellar Solutions NASA HQ

- **CoECI Strategy and Communications**
  Elizabeth E. Richard, Wyle JSC

- **COECI Innovation Coordinator**
  Cynthia M. Rando, CHFP, Wyle JSC

- **COECI Innovation Coordinator**
  Kathryn E. Keeton, PhD, Wyle JSC

- **COECI Academic Advisor**
  Karim Lakhani, Harvard
  Business School

- **Office of Science Technology Policy**
  Cristin Dorgelo

- **General Services Administration**
  Karen Trebon, Challenge.gov
  Tammi Marcoullier, Challenge.gov

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Key Functions

- **Educate and Share Best Practices**
  - Identify and champion innovative solutions by working collaboratively with other Government Agencies
  - Communicate best practices and successful innovation methodologies

- **Implementation Guidance**
  - Create repository for collaborative innovation best practice through use of multiple Community of Practices
  - Leverage existing collaborative innovation infrastructure to provide pilot tournaments

- **Measure Impact**
  - Measure and analyze Agency-focused performance

Educate and Share Best Practices

- Objectives:
  - Advise Government Agencies on innovation methodologies to build core competency and generate interest in distributed innovation
  - Solicit participation and contribution of agencies experienced with various innovation methodologies

- Implementation activities:
  - Disseminate case studies, best practices, and implementation guidance
  - In collaboration with GSA, Conduct Collaborative Innovation Community of Practice (CICoP) to:
    - Guide application of collaborative innovation techniques
    - Interpret legal and contractual guidance by providing precedent and case studies
    - Advance the state-of-the-art of collaborative innovation,
    - Formulate a body of knowledge

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Implementation Guidance

- **Objective:**

  - Select, prepare, and prioritize usage of infrastructure to conduct pilot projects for a participating Agency.

  - Develop repository for best practices, including case studies, model contracts, and acquisition strategy

- **Implementation activities:**

  - Develop Infrastructure including necessary web pages, social media sites, code repositories, etc

  - Establish mechanisms for selection and prioritization of challenges and tournaments

  - Extend Platform provider capability to conduct Pilot projects to Agencies through Interagency Agreements

    - NASA Tournament Lab

    - IDIQ and GSA Contracts

    - Challenge.gov

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Measure Impact

- **Objectives:**
  - Analyze and report data from experiments to inform the theory and practice of collaborative innovation
  - Advise the CoECI on optimal design characteristics of a sustained use model of distributed innovation

- **Implementation activities:**
  - Determine what is of value to the Government agencies participating in the CoECI activities
  - Determine what can be measured, and how to measure the qualitative benefits of these tools
  - Assess cost, time expended, and technical strength of the solutions and collaborative partnerships

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Builds on Successful Experience

- **Centennial Challenges**

- **NASA Innovation Pavilion Pilots**

- **NASA Tournament Lab**

- **Challenge.gov**

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- The Patent and Trademark Office has a huge volume of patents that must be reviewed

- Knowing how some labels on a drawing relate to the patent text is important

- Solution will make possible hyperlinks that will increase productivity, and remove irritating extra work scanning

- Varied fonts makes it difficult to distinguish between the patent pieces

- Original image processing contest success of 70% of the theoretical ideal answer, USPTO now running a follow up to improve upon the 70%. Total $60k prize money

U.S. Patent Sep. 16, 2003 Sheet 3 of 9 US 6,619,641 B2

FIG.3
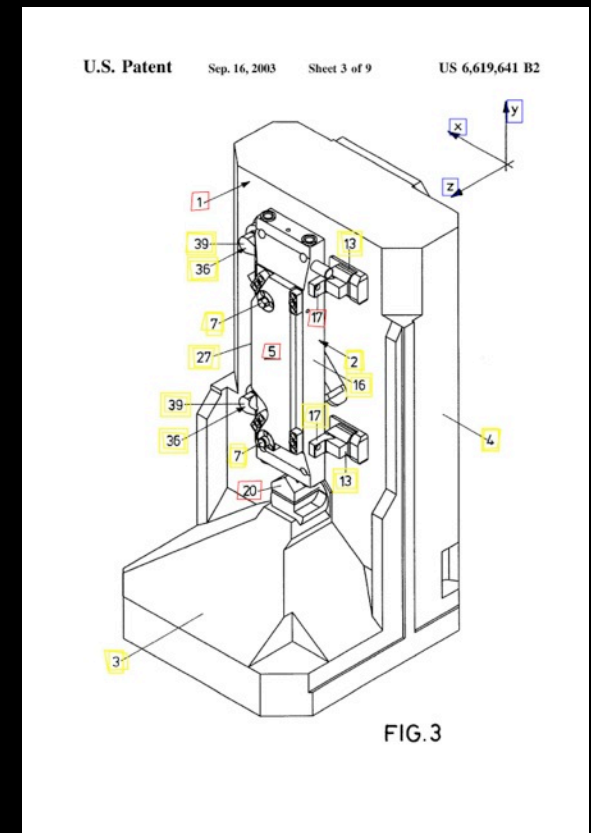
CMS Provider Screening

- Produce a shared services solution for States to leverage in verifying Medicaid provider eligibility, in order to reduce costs related to provider fraud.
  - Reduce time and cost to implement new solutions in state programs.
  - Inform the use of a shared services model as a best practice for States to adopt as they update and modernize their systems.

- Multi-stakeholder Environment
  - CMS and CMCS leadership
  - State of Minnesota (primary state stakeholder)
  - Additional states during the lifetime of the project

- Integrated Enterprise Software Solution
  - Built to a custom client-driven architecture (MITA)
  - Integrates with legacy systems (MMIS – COBOL)
  - Complies with US ADA Section 508 (Accessibility)
  - Complies with MITA 3.0 Architecture Framework
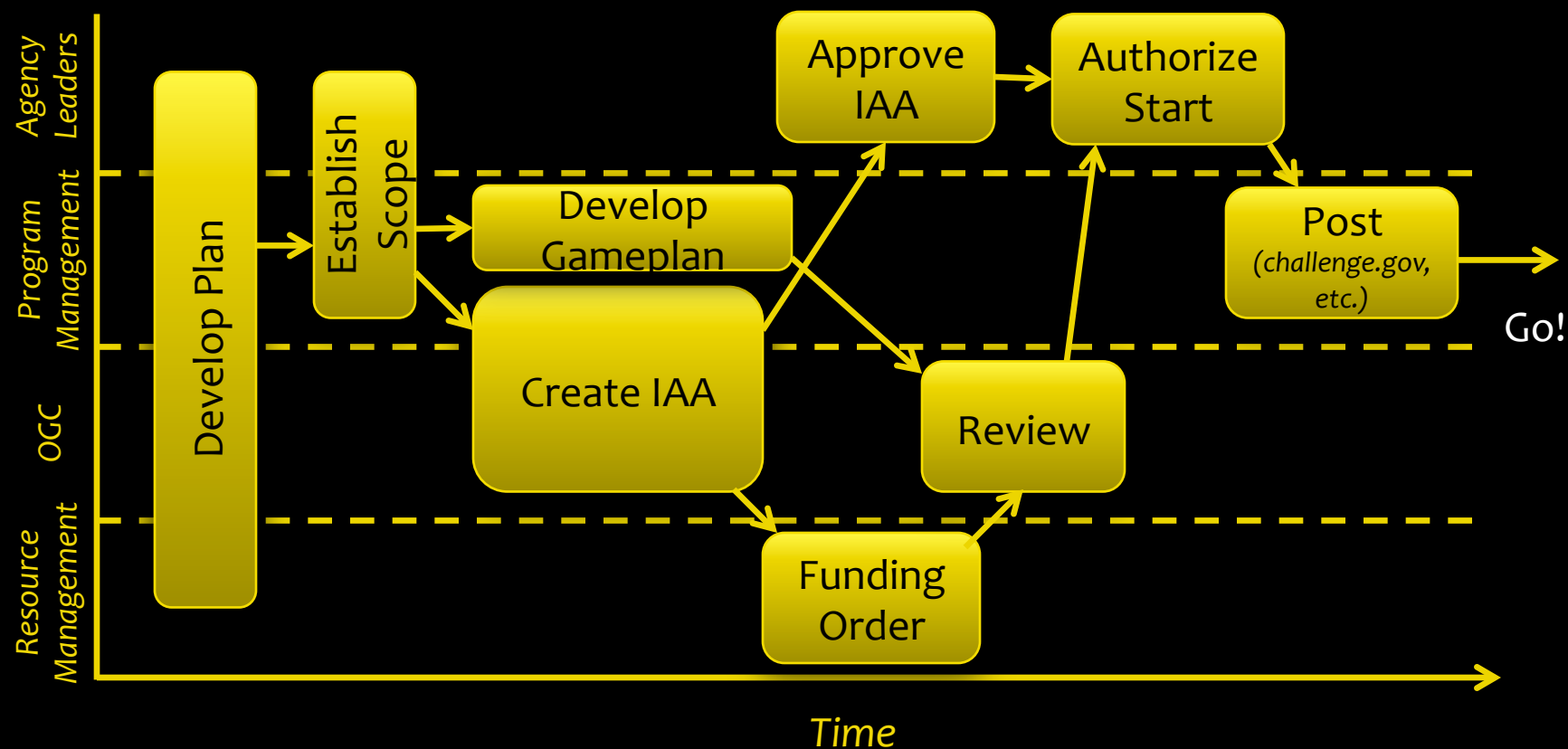
CMS Activities
Challenge #1
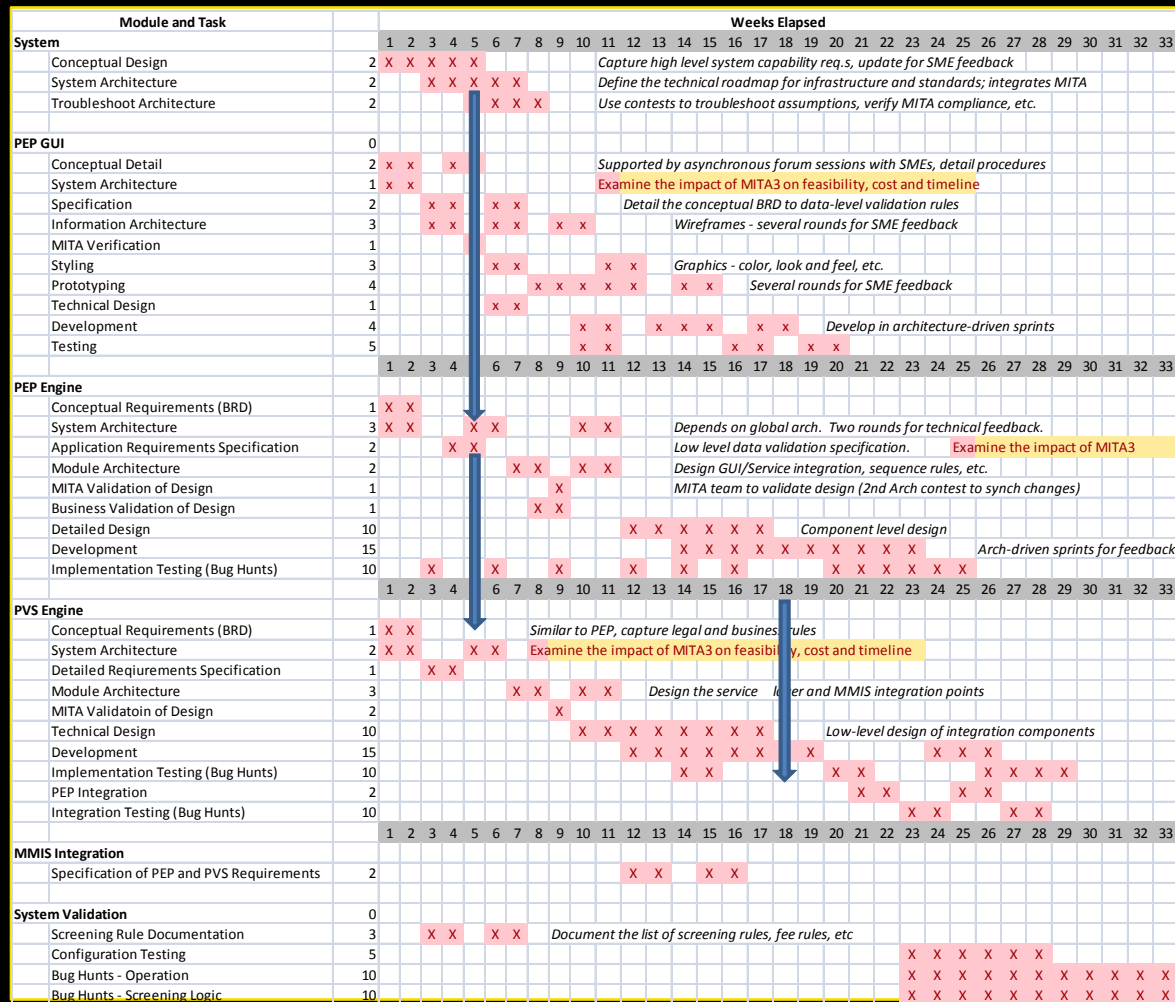
- Covers all phases of software development
  - Conceptual design through V&V
- ~135 Separate tournaments
- 33 weeks
- Overlapping contests (up to 9 parallel activities

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Engagement Path
Agency perspective

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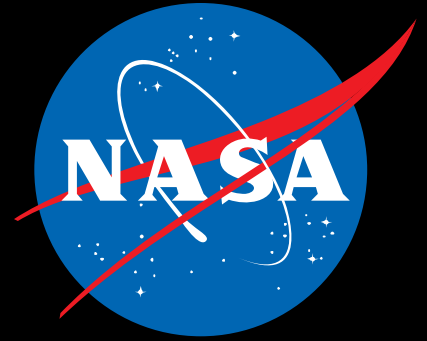
Next Steps

- **Establish proposed Agency Problem Set**
  - Determine needs and desired result
  - Establish Period of Performance
  - NASA provides contest scope and cost estimate

- **Interagency Agreement**
  - NASA will create draft
  - Agency reviews and approves

Contact us at:

www.nasa.gov/offices/COECI/

Email: nasa-coeci@mail.nasa.gov

Phone: 281-483-4040